

Atlantic and Gulf Shellfish Seed Biosecurity Collaborative

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Aquaculture is the fastest growing segment of food production, with molluscan shellfish aquaculture leading the way. A slower growth of hatchery capacity, combined with limited hatchery production in key areas of expansion like the Southeast, has led to seed shortages and subsequent increases in requests for seed importation across state lines. The situation has met significant barriers to growth and sustainability, including uncertainty about the potential risk of spreading pathogens and disease or exacerbating existing problems. In response, several Sea Grant-funded workshops took place, culminating in the establishment of a 13-member Shellfish Health Advisory Panel with three subcommittees: a Hatchery Certification Working Group, a Database Working Group, and a Pathology Working Group. A new model for managing interstate transfers is already serving information to reduce uncertainty, certifying hatchery biosecurity to facilitate aquaculture commerce, and changing perspectives through inherent outreach and extension. Both the database project and the hatchery certification programs are primed for expansion into the Gulf as they begin implementation along the Atlantic Coast.

This project will pursue four objectives to expand the applicability, functionality, utility, and long-term maintenance of the Shellfish Health Management Database and Hatchery Certification. This includes collaboratively assessing performance to date and applicability to the Gulf, expanding a database into the Gulf, establishing a surveillance program, and developing a future funding model. The overall outcome will be healthy wild and farmed shellfish in our coastal waters that will support

strong economic and ecological benefits. Shellfish aquaculture will flourish as barriers to seed acquisition will be reduced, enhancing production and stimulating local economies.

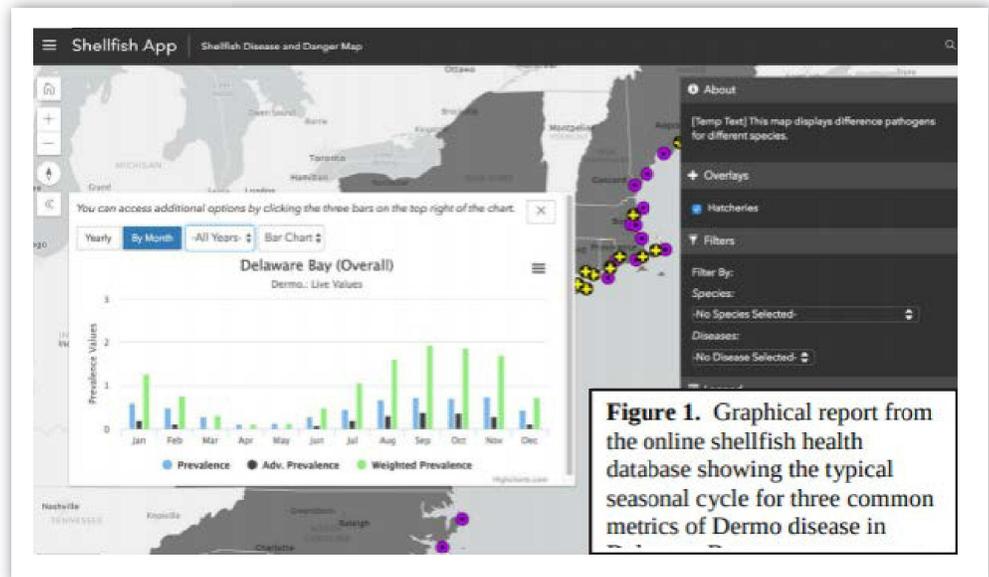


Figure 1. Graphical report from the online shellfish health database showing the typical seasonal cycle for three common metrics of Dermo disease in

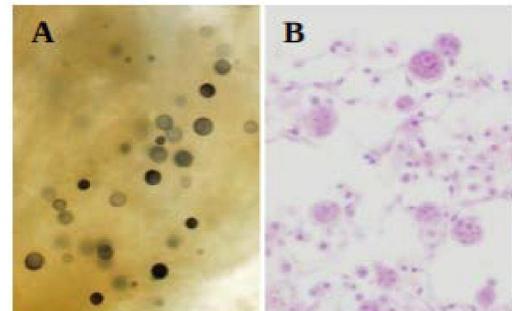


Figure 2. The most widespread pathogens of *Crassostrea virginica*. **A.** *Perkinsus marinus*. **B.** *Haplosporidium nelsoni*.